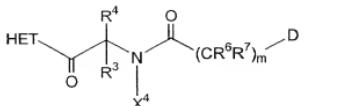


Claims

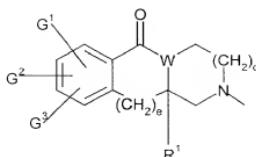
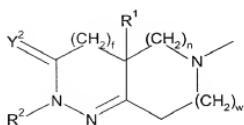
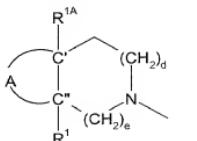
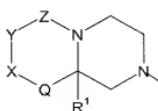
5 1. A compound of the formula



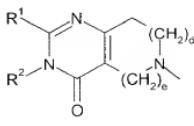
10 or a stereoisomeric mixture thereof, diastereomerically enriched, diastereomerically pure, enantiomerically enriched or enantiomerically pure isomer thereof, or a prodrug of such compound, mixture or isomer thereof, or a pharmaceutically acceptable salt of the compound, mixture, isomer or prodrug, wherein:

m is 0, 1 or 2;

HET is a heterocyclic moiety selected from the group consisting of



and



15 d is 0, 1 or 2;

e is 1 or 2;
f is 0 or 1;
n and w are 0, 1 or 2, provided that n and w cannot both be 0 at the same time;

5 Y^2 is oxygen or sulfur;

A is a radical, where the left hand side of the radical as shown below

is connected to C'' and the right hand side of the radical as shown below is connected to C' , selected from the group consisting of $-NR^2-C(O)-NR^2$, $-NR^2-S(O)_2-NR^2$, $-O-C(O)-NR^2$, $-NR^2-C(O)-O$, $-C(O)-NR^2-C(R^9R^{10})$, $-C(R^9R^{10})-NR^2$

10 $C(O)$, $-C(R^9R^{10})-C(R^9R^{10})$, $-C(R^9R^{10})$, $-S(O)_2-C(R^9R^{10})$, $-C(R^9R^{10})$, $-C(R^9R^{10})-O-C(O)$, $-C(R^9R^{10})-O-C(R^9R^{10})$, $-NR^2-C(O)-C(R^9R^{10})$, $-O-C(O)-C(R^9R^{10})$, $-C(R^9R^{10})-C(O)-NR^2$, $-C(O)-NR^2-C(O)-O$, $-C(R^9R^{10})-C(R^9R^{10})$, $-C(O)-NR^2-C(R^9R^{10})-C(R^9R^{10})$, $-C(O)-O-C(R^9R^{10})$, $-C(R^9R^{10})-C(R^9R^{10})$, $-C(R^9R^{10})-C(R^9R^{10})$, $-S(O)_2-NR^2-C(R^9R^{10})$, $-C(R^9R^{10})$, $-C(R^9R^{10})-C(R^9R^{10})-NR^2-C(O)$, $-C(R^9R^{10})-C(R^9R^{10})-O-C(O)$, $-NR^2-C(O)-C(R^9R^{10})$

15 $C(R^9R^{10})$, $-NR^2-S(O)_2-C(R^9R^{10})$, $-C(R^9R^{10})$, $-O-C(O)-C(R^9R^{10})$, $-C(R^9R^{10})$, $-C(R^9R^{10})-C(O)-NR^2$, $-C(R^9R^{10})-C(R^9R^{10})-C(O)$, $-C(R^9R^{10})-NR^2-C(O)-O$, $-C(R^9R^{10})-O-C(O)-NR^2$, $-C(R^9R^{10})-NR^2-C(O)-NR^2$, $-NR^2-C(O)-O-C(R^9R^{10})$, $-NR^2-C(O)-NR^2-C(R^9R^{10})$, $-C(O)-N=C(R^{11})-NR^2$, $-C(O)-NR^2-C(R^{11})=N$, $-C(R^9R^{10})-NR^{12}-C(R^9R^{10})$, $-NR^{12}-C(R^9R^{10})$

20 $-NR^{12}-C(R^9R^{10})-C(R^9R^{10})$, $-C(O)-O-C(R^9R^{10})-C(R^9R^{10})$, $-NR^2-C(R^{11})=N-C(O)$, $-C(R^9R^{10})-C(R^9R^{10})-N(R^{12})$, $-C(R^9R^{10})-NR^{12}$, $-N=C(R^{11})-NR^2-C(O)$, $-C(R^9R^{10})-C(R^9R^{10})-NR^2-S(O)_2$, $-C(R^9R^{10})-C(R^9R^{10})-S(O)_2-NR^2$, $-C(R^9R^{10})-C(R^9R^{10})-C(O)-O$, $-C(R^9R^{10})-S(O)_2-C(R^9R^{10})$, $-C(R^9R^{10})-C(R^9R^{10})-S(O)_2$, $-O-C(R^9R^{10})-C(R^9R^{10})$, $-C(R^9R^{10})-C(R^9R^{10})-O$, $-C(R^9R^{10})-C(O)-C(R^9R^{10})$

25 $-C(O)-C(R^9R^{10})-C(R^9R^{10})$ and $-C(R^9R^{10})-NR^2-S(O)_2-NR^2$;

Q is a covalent bond or CH_2 ;

W is CH or N ;

X is CR^9R^{10} , $C=CH_2$ or $C=O$;

Y is CR^9R^{10} , O or NR^2 ;

30 Z is $C=O$, $C=S$ or $S(O)_2$;

G^1 is hydrogen, halo, hydroxy, nitro, amino, cyano, phenyl, carboxyl, $-CONH_2$, $-(C_1-C_4)$ alkyl optionally independently substituted with one or more phenyl, one or more halogens or one or more hydroxy groups, $-(C_1-C_4)$ alkoxy optionally independently substituted with one or more phenyl, one or more halogens or one or

more hydroxy groups, $-(C_1-C_4)alkylthio$, phenoxy, $-COO(C_1-C_4)alkyl$, $N,N-di-(C_1-C_4)alkylamino$, $-(C_2-C_6)alkenyl$ optionally independently substituted with one or more phenyl, one or more halogens or one or more hydroxy groups, $-(C_2-C_6)alkynyl$ optionally independently substituted with one or more phenyl, one or more halogens or one or more hydroxy groups, $-(C_3-C_6)cycloalkyl$ optionally independently substituted with one or more $(C_1-C_4)alkyl$ groups, one or more halogens or one or more hydroxy groups, $-(C_1-C_4)alkylamino$ carbonyl or $di-(C_1-C_4)alkylamino$ carbonyl;

5 G^2 and G^3 are each independently selected from the group consisting of hydrogen, halo, hydroxy, $-(C_1-C_4)alkyl$ optionally independently substituted with one to three halogens and $-(C_1-C_4)alkoxy$ optionally independently substituted with one to three halogens;

10 R^1 is hydrogen, $-(CH_2)_qN(X^6)C(O)X^6$, $-(CH_2)_qN(X^6)C(O)(CH_2)-A^1$, $-(CH_2)_qN(X^6)S(O)_2(CH_2)-A^1$, $-(CH_2)_qN(X^6)S(O)_2X^6$, $-(CH_2)_qN(X^6)C(O)N(X^6)(CH_2)-A^1$, $-(CH_2)_qN(X^6)C(O)N(X^6)(X^6)$, $-(CH_2)_qC(O)N(X^6)(X^6)$, $-(CH_2)_qC(O)N(X^6)(CH_2)-A^1$, $-(CH_2)_qC(O)N(X^6)(X^6)(X^6)$, $-(CH_2)_qC(O)X^6$, $-(CH_2)_qC(O)(CH_2)-A^1$, $-(CH_2)_qOX^6$, $-(CH_2)_qOC(O)X^6$, $-(CH_2)_qOC(O)(CH_2)-A^1$, $-(CH_2)_qOC(O)N(X^6)(CH_2)-A^1$, $-(CH_2)_qOC(O)N(X^6)(X^6)$, $-(CH_2)_qC(O)X^6$, $-(CH_2)_qC(O)(CH_2)-A^1$, $-(CH_2)_qN(X^6)C(O)OX^6$, $-(CH_2)_qN(X^6)S(O)_2N(X^6)$, $-(CH_2)_qS(O)_mX^6$, $-(CH_2)_qS(O)_m(CH_2)-A^1$, $-(C_1-C_{10})alkyl$, $-(CH_2)_q-A^1$, $-(CH_2)_q-(C_3-C_7)cycloalkyl$, $-(CH_2)_q-Y^1-(C_1-C_6)alkyl$, $-(CH_2)_q-Y^1-(CH_2)_q-(C_3-C_7)cycloalkyl$;

15 where the alkyl and cycloalkyl groups in the definition of R^1 are optionally substituted with $(C_1-C_4)alkyl$, hydroxy, $(C_1-C_4)alkoxy$, carboxyl, $-CONH_2$,

$-S(O)_m(C_1-C_6)alkyl$, $-CO_2(C_1-C_4)alkyl$ ester, 1H-tetrazol-5-yl or 1, 2 or 3 fluoro groups;

20 Y^1 is O, $S(O)_m$, $-C(O)NX^6-$, $-CH=CH-$, $-C\equiv C-$, $-N(X^6)C(O)-$, $-C(O)NX^6-$,

25 $-C(O)O-$, $-OC(O)N(X^6)-$ or $-OC(O)-$;

q is 0, 1, 2, 3 or 4;

t is 0, 1, 2 or 3;

said $(CH_2)_q$ group and $(CH_2)_t$ group in the definition of R^1 are optionally independently substituted with hydroxy, $(C_1-C_4)alkoxy$, carboxyl, $-CONH_2$,

30 $-S(O)_m(C_1-C_6)alkyl$, $-CO_2(C_1-C_4)alkyl$ ester, 1H-tetrazol-5-yl, 1, 2 or 3 fluoro groups or 1 or 2 $(C_1-C_4)alkyl$ groups;

R^{1A} is selected from the group consisting of hydrogen, F, Cl, Br, I, $(C_1-C_6)alkyl$, $phenyl(C_1-C_3)alkyl$, $pyridyl(C_1-C_3)alkyl$, $thiazolyl(C_1-C_3)alkyl$ and $thienyl(C_1-C_3)alkyl$, provided that R^{1A} is not F, Cl, Br or I when a heteroatom is vicinal to C^* ;

R^2 , for each occurrence, is independently hydrogen, $(C_1\text{-}C_6)\text{alkyl}$, $-(C_0\text{-}C_3)\text{alkyl}\text{-}(C_3\text{-}C_6)\text{cycloalkyl}$, $-(C_1\text{-}C_4)\text{alkyl}\text{-}A^1$ or A^1 ;

where the alkyl groups and the cycloalkyl groups in the definition of R^2 are optionally substituted with hydroxy, $-\text{C}(\text{O})\text{OX}^6$, $-\text{C}(\text{O})\text{N}(X^6)(X^6)$, $-\text{N}(X^6)(X^6)$,

5 $-\text{S}(\text{O})_m(C_1\text{-}C_6)\text{alkyl}$, $-\text{C}(\text{O})A^1$, $-\text{C}(\text{O})(X^6)$, CF_3 , CN or 1, 2 or 3 independently selected halogens;

10 R^3 and R^4 are each independently selected from the group consisting of hydrogen, $(C_1\text{-}C_6)\text{alkyl}$, $-\text{CH}(R^8)\text{-aryl}$, $-\text{CH}(R^8)\text{-heteroaryl}$, $-(C_0\text{-}C_3)\text{alkyl}(C_3\text{-}C_6)\text{cycloalkyl}$, wherein the aryl or heteroaryl groups are optionally substituted by one or two R^b groups;

15 R^b , for each occurrence independently, is R^c , halo, $-\text{OR}^c$, $-\text{NHSO}_2\text{R}^c$, $-\text{N}(\text{R}^c)_2$, $-\text{CN}$, $-\text{NO}_2$, $-\text{SO}_2\text{N}(\text{R}^c)_2$, $-\text{SO}_2\text{R}^c$, $-\text{CF}_3$, $-\text{OCF}_3$, $-\text{OCF}_2\text{H}$ or two R^b groups attached to adjacent carbon atoms taken together to form methylenedioxy;

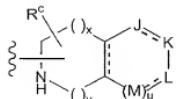
20 R^c , for each occurrence independently, is hydrogen, $-(C_1\text{-}C_6)\text{alkyl}$, $-(C_0\text{-}C_3)\text{alkylaryl}$, $-(C_0\text{-}C_3)\text{alkylheteroaryl}$, $(C_3\text{-}C_6)\text{cycloalkyl}$; or 2 R^b taken together with the nitrogen atom to which they are attached to form a 5- or 6- membered ring optionally containing an additional heteroatom selected from O, S or NR^3 ;

25 R^6 and R^7 are each independently selected from hydrogen, $(C_1\text{-}C_6)\text{alkyl}$, $-(C_0\text{-}C_3)\text{alkylaryl}$, $-(C_0\text{-}C_3)\text{alkylheteroaryl}$, $-(C_0\text{-}C_3)\text{alkyl}(C_3\text{-}C_6)\text{cycloalkyl}$;

or R^6 and R^7 together with the nitrogen atom to which they are attached form a 5- or 6-membered ring optionally containing an additional heteroatom selected from O, S, NR^3 ;

30 D is $-(C_0\text{-}C_6)\text{alkyl}\text{-amino}\text{-C}(\text{=NR}^7)\text{-NR}^{15}\text{R}^{16}$, $-(C_0\text{-}C_6)\text{alkylaminopyridyl}$, $-(C_0\text{-}C_6)\text{alkylaminimidazolyl}$, $-(C_0\text{-}C_6)\text{alkylaminothiazolyl}$, $-(C_0\text{-}C_6)\text{alkylaminopyrimidinyl}$,

35 $(C_0\text{-}C_6)\text{alkylaminopiperazinyl}\text{-}R^{15}$, $-(C_0\text{-}C_6)\text{alkylmorpholinyl}$, wherein R^{15} and R^{16} are independently hydrogen, $-(C_1\text{-}C_6)\text{alkyl}$, $-(C_0\text{-}C_3)\text{alkylaryl}$, $-(C_0\text{-}C_3)\text{alkylheteroaryl}$, $-(C_0\text{-}C_3)\text{alkyl}(C_3\text{-}C_6)\text{cycloalkyl}$, wherein the alkyl and aryl groups are optionally substituted with one or two R^b groups; or D is a group of the formula



wherein the dashed lines represent optional double bonds;

u is 0 or 1;

x and y are each independently 0, 1 or 2;

J, K, L and M are each independently selected from C(R^b), N, S or O wherein R^b and R^c are as defined above and r is 1 or 2;

5 X⁴ is hydrogen or (C₁-C₆)alkyl or X⁴ is taken together with R⁴ and the nitrogen atom to which X⁴ is attached and the carbon atom to which R⁴ is attached and form a five to seven membered ring;

10 R⁸ is hydrogen, -(C₁-C₈)alkyl, -(C₀-C₃)alkylaryl, -(C₀-C₃)alkylheteroaryl, -(C₃-C₆)cycloalkyl; or 2 R^b taken together with the nitrogen atom to which they are attached to form a 5- or 6- membered ring optionally containing an additional heteroaryl selected from O, S or NR³;

R⁹ and R¹⁰, for each occurrence, are each independently selected from the group consisting of hydrogen, fluoro, hydroxy and (C₁-C₅)alkyl optionally independently substituted with 1-5 halogens;

15 R¹¹ is selected from the group consisting of (C₁-C₅)alkyl and phenyl optionally substituted with 1-3 substituents each independently selected from the group consisting of (C₁-C₅)alkyl, halo and (C₁-C₅)alkoxy;

20 R¹² is selected from the group consisting of (C₁-C₅)alkylsulfonyl, (C₁-C₅)alkanoyl and (C₁-C₅)alkyl where the alkyl portion is optionally independently substituted by 1-5 halogens;

25 A¹ for each occurrence is independently selected from the group consisting of (C₅-C₇)cycloalkenyl, phenyl, a partially saturated, fully saturated or fully unsaturated 4- to 8-membered ring optionally having 1 to 4 heteroatoms independently selected from the group consisting of oxygen, sulfur and nitrogen and a bicyclic ring system consisting of a partially saturated, fully unsaturated or fully saturated 5- or 6-membered ring, optionally having 1 to 4 heteroatoms independently selected from the group consisting of nitrogen, sulfur and oxygen, fused to a partially saturated, fully saturated or fully unsaturated 5- or 6-membered ring, optionally having 1 to 4 heteroatoms independently selected from the group consisting of nitrogen, sulfur and oxygen;

30 A¹ for each occurrence is independently optionally substituted, on one or optionally both rings if A¹ is a bicyclic ring system, with up to three substituents, each substituent independently selected from the group consisting of F, Cl, Br, I, -OCF₃, -OCF₂H, -CF₃, -CH₃, -OCH₃, -OX⁶,

-C(O)N(X⁶)(X⁶), -C(O)OX⁶, oxo, (C₁-C₆)alkyl, nitro, cyano, benzyl,
-S(O)_m(C₁-C₆)alkyl, 1H-tetrazol-5-yl, phenyl, phenoxy, phenylalkyloxy,
halophenyl, methylenedioxy, -N(X⁶)(X⁶), -N(X⁶)C(O)(X⁶), -S(O)₂N(X⁶)(X⁶),
-N(X⁶)S(O)₂phenyl, -N(X⁶)S(O)₂X⁶, -CONX¹¹X¹², -S(O)₂NX¹¹X¹²,

5 -NX⁶S(O)₂X¹², -NX⁶CONX¹¹X¹², -NX⁶S(O)₂NX¹¹X¹², -NX⁶C(O)X¹², imidazolyl,
thiazolyl and tetrazolyl, provided that if A¹ is optionally substituted with
methyleneedioxy then it can only be substituted with one methylenedioxy;

where X¹¹, for each occurrence, is independently hydrogen or
optionally substituted (C₁-C₆)alkyl;

10 the optionally substituted (C₁-C₆)alkyl defined for X¹¹ is
optionally independently substituted with phenyl, phenoxy, (C₁-
C₆)alkoxycarbonyl, -S(O)_m(C₁-C₆)alkyl, 1 to 5 halogens, 1 to 3
hydroxy groups, 1 to 3 (C₁-C₁₀)alkanoyloxy groups or 1 to 3
(C₁-C₆)alkoxy groups;

15 X¹², for each occurrence, is independently hydrogen, (C₁-C₆)alkyl,
phenyl, thiazolyl, imidazolyl, furyl or thienyl, provided that when X¹² is
not hydrogen, the X¹² group is optionally substituted with one to three
substituents independently selected from the group consisting of Cl, F,
CH₃, OCH₃, OCF₃ and CF₃;

20 or X¹¹ and X¹² are taken together to form -(CH₂)_gL¹-(CH₂)_g;

L¹ is C(X²)(X²), O, S(O)_m or N(X²);

g for each occurrence is independently 1, 2 or 3;

X² for each occurrence is independently hydrogen, optionally substituted (C₁-
C₆)alkyl or optionally substituted (C₃-C₇)cycloalkyl, where the optionally substituted
25 (C₁-C₆)alkyl and optionally substituted (C₃-C₇)cycloalkyl in the definition of X² are
optionally independently substituted with -S(O)_m(C₁-C₆)alkyl, -C(O)OX³, 1 to 5
halogens or 1-3 OX³ groups;

X³ for each occurrence is independently hydrogen or (C₁-C₆)alkyl;

X⁶ for each occurrence is independently hydrogen, optionally substituted (C₁-

30 C₆)alkyl, (C₂-C₆)halogenated alkyl, optionally substituted (C₃-C₇)cycloalkyl, (C₃-C₇)-
halogenated cycloalkyl, where optionally substituted (C₁-C₆)alkyl and optionally
substituted (C₃-C₇)cycloalkyl in the definition of X⁶ is optionally independently mono-
or di-substituted with (C₁-C₆)alkyl, hydroxy, (C₁-C₆)alkoxy, carboxyl, CONH₂,
-S(O)_m(C₁-C₆)alkyl, carboxylate (C₁-C₆)alkyl ester or 1H-tetrazol-5-yl; or

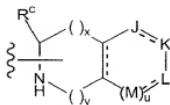
when there are two X^6 groups on one atom and both X^6 are independently (C₁-C₆)alkyl, the two (C₁-C₆)alkyl groups may be optionally joined and, together with the atom to which the two X^6 groups are attached, form a 4- to 9- membered ring optionally having oxygen, sulfur or NX⁷ as a ring member;

5 X⁷ is, for each occurrence independently, hydrogen or (C₁-C₆)alkyl optionally substituted with hydroxy;

m for each occurrence is independently 0, 1 or 2;

with the proviso that: X⁶ and X¹² cannot be hydrogen when attached to C(O) or S(O)₂ in the form C(O)X⁶, C(O)X¹², S(O)X⁶ or S(O)₂X¹².

10 2. A compound according to claim 1, wherein D is

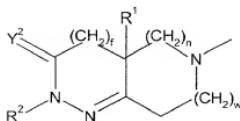


3. A compound according to claim 2, wherein x is 1, y is 1 and u is 1.

4. A compound according to claim 3, wherein J, K, L and M are each

15 NR^b or C(R^b), where r = 1 or 2, R⁴ is -CH₂-aryl in which aryl is optionally substituted by R^b

5. A compound according to claim 4, wherein HET is



20 6. A compound according to claim 5, wherein Y² is oxygen, f is 0, n is 1 or 2; and w is 0 or 1.

7. A compound according to claim 6, wherein R² is (C₁-C₆)alkyl optionally substituted by halo, R³ is hydrogen, n is 1, w is 1, and R¹ is aryl(C₁-C₆)alkyl, (C₁-C₆)alkyl or heteroaryl(C₁-C₆)alkyl wherein aryl and heteroaryl are optionally substituted with one or two groups from the following list: halo, -OR^c, -NHSO₂R^c, -N(R^c)₂, -CN, -NO₂, -SO₂N(R^c)₂, -SO₂R^c, -CF₃, -OCF₃, -OCF₂H.

8. A compound according to claim 7, wherein J, K, L and M are each N or CR^b and the dashed lines represent double bonds, R¹ is benzyl optionally substituted by halo, -R^c, -OR^c, -CF₃, -OCF₃, -OCF₂H, R^c, hydrogen, -(C₁-C₆)alkyl,

5 -(C₀-C₃)alkylaryl, -(C₀-C₃)alkylheteroaryl or -(C₃-C₆)cycloalkyl.

9. A compound according to claim 1, wherein said compound is selected from the group consisting of:

1,2,3,4-Tetrahydro-isoquinoline-(S)3-carboxylic acid [2-((R)3a-benzyl-2-methyl-3-oxo-2,3,3a,4,6,7-hexahydro-pyrazolo[4,3-c]pyridin-5-yl)-(R)1-(4-chloro-benzyl)-2-oxo-ethyl]-amide;

10 1,2,3,4-Tetrahydro-isoquinoline-(R)3-carboxylic acid [2-((R)3a-benzyl-2-methyl-3-oxo-2,3,3a,4,6,7-hexahydro-pyrazolo[4,3-c]pyridin-5-yl)-(R)1-(4-chloro-benzyl)-2-oxo-ethyl]-amide;

15 1,2,3,4-Tetrahydro-isoquinoline-(R)3-carboxylic acid [2-[3a-benzyl-3-oxo-2-(2,2,2-trifluoro-ethyl)-2,3,3a,4,6,7-hexahydro-pyrazolo[4,3-c]pyridin-5-yl)-(R)1-(4-chloro-benzyl)-2-oxo-ethyl]-amide;

1,2,3,4-Tetrahydro-isoquinoline-(R)3-carboxylic acid {((R)1-(4-chloro-benzyl)-2-[2-ethyl-(S)3a-(4-fluoro-benzyl)-3-oxo-2,3,3a,4,6,7-hexahydro-pyrazolo[4,3-c]pyridin-5-yl)-2-oxo-ethyl]-amide;

20 1,2,3,4-Tetrahydro-isoquinoline-(S)3-carboxylic acid {((R)1-(4-chloro-benzyl)-2-[2-ethyl-(S)3a-(4-fluoro-benzyl)-3-oxo-2,3,3a,4,6,7-hexahydro-pyrazolo[4,3-c]pyridin-5-yl)-2-oxo-ethyl]-amide;

1,2,3,4-Tetrahydro-isoquinoline-(S)3-carboxylic acid {((R)1-(4-chloro-benzyl)-2-[(S)3a-(4-chloro-benzyl)-2-ethyl-3-oxo-2,3,3a,4,6,7-hexahydro-pyrazolo[4,3-c]pyridin-5-yl)-2-oxo-ethyl]-amide;

25 1,2,3,4-Tetrahydro-isoquinoline-(R)3-carboxylic acid {((R)1-(4-chloro-benzyl)-2-[(S)3a-(4-chloro-benzyl)-2-ethyl-3-oxo-2,3,3a,4,6,7-hexahydro-pyrazolo[4,3-c]pyridin-5-yl)-2-oxo-ethyl]-amide;

1,2,3,4-Tetrahydro-isoquinoline-(R)3-carboxylic acid [2-((S)3a-benzyl-2-methyl-3-oxo-2,3,3a,4,6,7-hexahydro-pyrazolo[4,3-c]pyridin-5-yl)-(R)1-(4-chloro-benzyl)-2-oxo-ethyl]-amide;

30 1,2,3,4-Tetrahydro-isoquinoline-(R)3-carboxylic acid {((R)1-(4-chloro-benzyl)-2-[(R)3a-(3-fluoro-benzyl)-3-oxo-2,3,3a,4,6,7-hexahydro-pyrazolo[4,3-c]pyridin-5-yl)-2-oxo-ethyl]-amide;

1,2,3,4-Tetrahydro-isoquinoline-(S)3-carboxylic acid [2-[3a-benzyl-3-oxo-2-(2,2,2-trifluoro-ethyl)-2,3,3a,4,6,7-hexahydro-pyrazolo[4,3-c]pyridin-5-yl]-{(R)1-(4-chloro-benzyl)-2-oxo-ethyl}-2-oxo-ethyl]-amide; and

1,2,3,4-Tetrahydro-isoquinoline-(R)3-carboxylic acid [(R)1-(4-chloro-benzyl)-

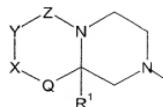
5 2-oxo-2-(3-oxo-3a-pyridin-2-ylmethyl-2,3,3a,4,6,7-hexahydro-pyrazolo[4,3-c]pyridin-5-yl)-ethyl]-amide.

10. A compound according to claim 7, wherein J, K, L and M are each

NR^b or C(R^b)₂ and the dashed lines represent single bonds, wherein R^b is hydrogen, halo, R^c, -OR^c, -CF₃, -OCF₃, -OCF₂H, R^c is hydrogen, (C₁-C₆)alkyl, (C₆-C₃)alkylaryl,

10 (C₆-C₃)alkylheteroaryl or -(C₃-C₆)cycloalkyl.

11. A compound according to claim 4, wherein HET is



12. A compound according to claim 11, wherein Q is a covalent bond; X and Z are each C=O; and Y is NR².

15 13. A compound according to claim 12, wherein R² is (C₁-C₆)alkyl

optionally substituted by halo, and R¹ is aryl(C₁-C₆)alkyl, (C₁-C₆)alkyl or heteroaryl (C₁-C₆)alkyl wherein aryl and heteroaryl are optionally substituted with one or two groups from the following list: halo, OR^c, -NHSO₂R^c, N(R^c)₂, CN, NO₂, SO₂N(R^c)₂, -SO₂R^c, -CF₃, -OCF₃, -OCF₂H.

20 14. A compound according to claim 13, wherein J, K, L and M are each N or CR^b and the dashed lines represent double bonds, R¹ is benzyl optionally substituted by halo, -R^c, -OR^c, -OCF₃, -OCF₂H, and R^c is hydrogen, -(C₁-C₆)alkyl, -(C₆-C₃)alkylaryl, -(C₆-C₃)alkylheteroaryl or -(C₃-C₆)cycloalkyl.

15. A compound according to claim 1, wherein said compound is

25 selected from the group consisting of:

1,2,3,4-Tetrahydro-isoquinoline-(S)3-carboxylic acid [(R)1-(4-chloro-benzyl)-2-[1,3-dioxo-(S)8a-pyridin-2-ylmethyl-2-(2,2,2-trifluoro-ethyl)-hexahydro-imidazo[1,5-a]pyrazin-7-yl]-2-oxo-ethyl]-amide;

1,2,3,4-Tetrahydro-isoquinoline-(R)3-carboxylic acid ((R)1-(4-chloro-benzyl)-2-[(R)8a-(4-fluoro-benzyl)-2-methyl-1,3-dioxo-hexahydro-imidazo[1,5-a]pyrazin-7-yl]-2-oxo-ethyl]-amide;

1,2,3,4-Tetrahydro-isoquinoline-(S)3-carboxylic acid ((R)1-(4-chloro-benzyl)-

5 2-[1,3-dioxo-(S)8a-pyridin-3-ylmethyl-2-(2,2,2-trifluoro-ethyl)-hexahydro-imidazo[1,5-a]pyrazin-7-yl]-2-oxo-ethyl]-amide;

1,2,3,4-Tetrahydro-isoquinoline-(S)3-carboxylic acid ((R)1-(4-chloro-benzyl)-2-[8a-(4-fluoro-benzyl)-3-oxo-tetrahydro-oxazolo[3,4-a]pyrazin-7-yl]-2-oxo-ethyl]-amide;

10 1,2,3,4-Tetrahydro-isoquinoline-(S)3-carboxylic acid ((R)1-(4-chloro-benzyl)-2-[8a-(4-fluoro-benzyl)-2-methyl-1,3-dioxo-hexahydro-imidazo[1,5-a]pyrazin-7-yl]-2-oxo-ethyl]-amide; and

1,2,3,4-Tetrahydro-isoquinoline-(S)3-carboxylic acid ((R)1-(4-chloro-benzyl)-2-[8a-(4-fluoro-benzyl)-2-methyl-1,3-dioxo-hexahydro-imidazo[1,5-a]pyrazin-7-yl]-2-oxo-ethyl]-amide.

16. A compound according to claim 13, wherein J, K, L and M are each NR^b or C(R^b)₂ and the dashed lines represent single bonds, R^b is hydrogen, halo, R^c, OR^c, -CF₃, -OCF₃, -OCF₂H, R^c is hydrogen, -C₁-C₆)alkyl, -(C₀-C₃)alkylaryl, -(C₀-C₃)alkylheteroaryl or -(C₃-C₆)cycloalkyl.

20 17. A method for the treatment or prevention of disorders, diseases or conditions responsive to the activation of melanocortin receptor which comprises administering to a mammal in need of such treatment or prevention an effective amount of a compound of Claim 1.

18. A method for the treatment or prevention of obesity which comprises 25 administering to a mammal in need of such treatment or prevention an effective amount of a compound of Claim 1.

19. A method for the treatment or prevention of diabetes mellitus which comprises administering to a mammal in need of such treatment or prevention an effective amount of Claim 1.

30 20. A method for the treatment or prevention of male or female sexual dysfunction which comprises administering to a mammal in need of such treatment or prevention an effective amount of a compound of Claim 1.

21. A method for the treatment or prevention of erectile dysfunction which

comprises administering to a mammal in need of such treatment or prevention an effective amount of a compound of Claim 1.

22. A method for modulating appetite and metabolic rates of mammals which comprises administering to a mammal in need of such treatment or prevention an effective amount of a compound of Claim 1.

23. A method for treating or preventing disorders that cause reduction in appetite, feeding behavior and/or body weight in a mammal which comprises administering to a mammal in need of such treatment or prevention an effective amount of a compound of Claim 1.

10 24. A method for acutely stimulating the appetite of companion animals for the treatment of hepatic lipidosis, cachexia and other pathologies resulting in/from inappropriate food intake and weight loss, which comprises administering to a mammal in need of such treatment or prevention an effective amount of a compound of Claim 1.

15 25. A method for acutely stimulating the appetite of livestock for the treatment of ketosis, postpartum anestrus, and other metabolic and reproductive pathologies resulting in/from inappropriate food intake and weight loss which comprises administering to a mammal in need of such treatment or prevention an effective amount of a compound of Claim 1.

20 26. A method that will enhance growth and survivability of neonates in livestock which comprises administering to a mammal in need of such treatment or prevention an effective amount of a compound of Claim 1.

27. A pharmaceutical composition which comprises a compound of Claim 1 and a pharmaceutically acceptable carrier.

25 28. A pharmaceutical composition of claim 27 further comprising a second active ingredient selected from an insulin sensitizer, insulin mimetic, sulfonylurea, α -glucosidase inhibitor, HMG-CoA reductase inhibitor, sequestrant cholesterol lowering agent, β 3 adrenergic receptor agonists, neuropeptide Y antagonist, phosphodiester V inhibitor, and α -2 adrenergic receptor antagonist.